	Application No.	Applicant(s)
Notice of Allowability	10/530,787	HELDMANN ET AL.
	Examiner	Art Unit
	J. Woodrow Eldred	3641
The MAILING DATE of this communication appears on the cover sheet with the correspondence address All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.		
1. This communication is responsive to		
2. The allowed claim(s) is/are 11-21.		
<ul> <li>3.  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a)  All b)  Some* c) None of the:</li> <li>1.  Certified copies of the priority documents have been received.</li> <li>2.  Certified copies of the priority documents have been received in Application No</li> </ul>		
3. Copies of the certified copies of the priority documents have been received in Application 100.		
International Bureau (PCT Rule 17.2(a)).		
* Certified copies not received:		
Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.		
4. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.		
5. CORRECTED DRAWINGS (as "replacement sheets") must be submitted.		
(a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached		
1) 🗌 hereto or 2) 🔲 to Paper No./Mail Date		
(b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date		
Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).		
<ol> <li>DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.</li> </ol>		
Attachment(s) 1. ⊠ Notice of References Cited (PTO-892)	5 ☐ Notice of Informal P	atent Application (PTO-152)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)	6. Interview Summary	(PTO-413),
3. Information Disclosure Statements (PTO-1449 or PTO/SB/0	Paper No./Mail Dat 08), 7. ☐ Examiner's Amendr	
Paper No./Mail Date  4. Examiner's Comment Regarding Requirement for Deposit of Biological Material	_	ent of Reasons for Allowance
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## **DETAILED ACTION**

1. The following is an examiner's statement of reasons for allowance: The prior art fails to disclose or make obvious the claimed firing module. Specifically, the prior art fails to show a firing module with a rotatable housing; a weapon mounted in the housing on a trunnion; an automatic shell supply mechanism as claimed with a shell transfer arm, mounted on the trunnion, with a shell ram having a pivoting loading tray; a shell transporter as claimed with a shell transport arm with a gripping mechanism to grasp vertical shells in an ammunition magazine and supply the loading tray with the shell; a propellant charge magazine; an automatic propellant charge supply mechanism that supplies propellant to the weapon with a propellant charge supply tray and ram; where the ammunition magazine and the shell transporter are located ahead of the trunnion; the shell transfer arm and loading tray pivots from a receiving position ahead of the trunnion and a loading position behind the trunnion; the propellant charge magazine is next to or behind the trunnion; and where the propellant charge supply tray is pivotable into a region behind the weapon.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

- 2. Claims 11-21 are allowed.
- 3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Domeij, Panek et al, Engstrom, Muhlhausen et al, Schiele et al, and Zielinski et al are cited as being of interest since they disclose firing and ammunition transfer systems for weapons.
- 4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to J. Woodrow Eldred whose telephone number is 571-272-6901. The examiner can normally be reached on Monday to Thursday, from 8:00 a.m. to 5:30 p.m..

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Carone can be reached on 571-272-6873. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

J. Woodrow Eldred
Primary Examiner
Art Unit 3641

**JWE**